

AMENDMENT AND RESPONSE AND SUMMARY OF PERSONAL INTERVIEW WITH THE EXAMINER

Ser No. 10/666,573

February 1, 2005

Amendment

In the Claims:

Please amend claims 1, 14 and 17, and cancel claims 15-16, as follows:

1. (currently amended) A fire retardant intumescent coating composition selected from the group consisting of solvanted coating compositions, aqueous coating compositions and powder coating compositions, said composition comprising:

- (a) 30 to 60% by weight of a phosphorous containing material which decomposes to produce phosphoric acid when the coating is exposed to fire;
- (b) 10 to 30% by weight of a thermosetting binder;
- (c) 2.5 to 10% by weight of a curing agent for the thermosetting binder; and
- (d) 5 to 40% by weight of a thermoplastic binder comprising an oxygenated heterocyclic thermoplastic resin,

wherein each of the thermosetting and thermoplastic binders comprise groups that react with the said phosphoric acid, thereby imparting charring and blowing functions to the intumescent coating composition, and,

further wherein, when the said coating composition is the said solvanted coating composition, the said thermoplastic binder comprises an oxygenated heterocyclic thermoplastic resin.

2. (original) A fire retardant intumescent coating composition according to claim 1 wherein the binder system accounts for 30% or more by weight of the composition.

3. (previously presented) A fire retardant intumescent coating composition according to claim 1 wherein the phosphorous containing material is a sodium, potassium or ammonium polyphosphate.

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4. (previously presented) A fire retardant intumescent coating composition according to claim 1 wherein the thermosetting binder is a hydroxylated thermosetting resin.
5. (previously presented) A fire retardant intumescent coating composition according to any one of claims 1 to 4 wherein the thermosetting resin is an epoxy resin.
6. (previously presented) A fire retardant intumescent coating composition according to claim 1 wherein the curing agent for the thermosetting binder is a phenolic curing agent.
7. (canceled).
8. (previously presented) A fire retardant intumescent composition according to claim 1 wherein the thermoplastic is an aldehyde or ketone resin.
9. (previously presented) A fire retardant intumescent coating composition according to claim 1 containing 0.1 to 10% by weight of a melt viscosity modifier.
10. (original) A fire retardant intumescent coating composition according to claim 9 wherein the melt viscosity modifier is hydrogenated castor oil.
11. (previously presented) A fire retardant intumescent coating composition according to claim 1 containing 1 to 10% by weight of a colouring agent.
12. (original) A fire retardant intumescent coating composition according to claim 11 wherein the colouring agent is titanium dioxide.

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13. (previously presented) A fire retardant intumescent coating composition according to claim 1 containing one or more additives selected from the group consisting of a china clay, melamine phosphate, vitrifiers, metal salts and melamine.
14. (currently amended) A fire retardant intumescent powder coating composition as claimed in claim 1 comprising the following components:
- (a) ~~30 to 60% by weight of a phosphorous-containing material which decomposes to produce phosphoric acid when the coating is exposed to fire;~~
- (b) ~~10 to 30% by weight of a thermosetting binder;~~
- (c) ~~2.5 to 10% by weight of a curing agent for the thermosetting binder; and,~~
- (d) ~~5 to 40% by weight of a thermoplastic binder~~
~~in which a)-(d) must always add up to 100% by weight, wherein each of the said thermosetting and thermoplastic binders comprise groups that react with the said phosphoric acid, thereby imparting charring and blowing function to the intumescent coating composition, and,~~
- further wherein, the said composition is made by a process comprising premixing the said components (a)-(d), extruding the premix, and grinding the thus formed extrudate to form a powder.
- 15-16. (canceled).
17. (currently amended) A composition according to claim ~~any one of claims 14 to 16~~ wherein the thermoplastic resin is an oxygenated heterocyclic thermoplastic resin.
18. (previously presented) A composition according to claim 17 wherein the thermoplastic resin is an aldehyde or ketone resin.
19. (canceled).